DOCUMENT RESUME

ED 140 006 CE 011 105

AUTHOR Carney, Mary Margaret
TITLE A Study of the Relationships of Selected Personal and Professional Characteristics to Change, Non-Change, and Value-Interest Orientations of Professional Adult Educators.
PUB DATE Apr 77
NOTE 26p.; Paper presented at the Adult Education Research Conference (Minneapolis, Minnesota, April 1977)

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS Adult Education; *Adult Educators; *Change Agents; *Educational Change; Educational Experience; Educational Research; Females; *Individual Characteristics; Males; *Personal Interests; *Personal Values; Questionnaires; Surveys; Teacher Characteristics

ABSTRACT

The study was designed to examine the personal and professional characteristics related to change and nonchange orientations of adult educators. A personal data form consisting of personal characteristics (age and sex) and professional characteristics (years of experience in adult education, institution from which the doctorate was secured, professional role, and institutional setting) was mailed with an instrument, designed to measure orientations to change, nonchange, and value-interest, to a stratified random sample of 225 professional adult educators with a major in adult education who received doctorates from 1960 to 1970 inclusive. The data were quantified and analyzed by multiple regression and analysis of variance which produced means, correlation co-efficients of personal and professional characteristics with orientations, and on F-test to analyze variation which might be attributable to the independent variables (personal and professional characteristics). The following hypotheses for professional adult educators were supported: (1) Their orientation toward change and nonchange are associated with value-interested orientations, (2) they are change oriented, (3) they are value oriented, (4) women are less change oriented than men, (5) orientation toward change, nonchange, and value-interest are associated with the institution from which the doctorate was secured, and (6) orientation toward change and nonchange are associated with the institutional setting. (The survey instrument and background information are included in this paper.) (Author)

**********
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
**********

12

ED140006

# A STUDY OF THE RELATIONSHIPS OF SELECTED PERSONAL AND PROFESSIONAL CHARACTERISTICS TO CHANGE, NON-CHANGE, AND VALUE-INTEREST ORIENTATIONS OF PROFESSIONAL ADULT EDUCATORS

By Dr. Mary Margaret Carney

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

## Introduction to the Problem

The term "change agent" was first used in laboratory studies of small groups in 1947 reported by Lippitt and others in The Dynamics of Planned Change (ff. Lippitt and others, page 10).

A leading adult educator, Malcolm Knowles, states that the adult educator may take the role of direct instructor or trainer, but more frequently his role will be that of planner, consultant, or "change agent"--a specialized role to which modern adult education literature is devoting increasing attention. (Knowles, The Modern Practice of Adult Education, page 31)

Attention then focuses on adult educators as "change agents" as their function has moved from being remedial toward being developmental--toward helping their clients achieve full potential. (ff. Knowles, The Modern Practice of Adult Education, page 34) Carrying out such a function is, however, dependent to a large degree upon the personal and professional characteristics of individual adult educators. The purpose of this study was to determine if adult educators are, indeed, oriented toward change or non-change. Unless professional adult educators are change-prone themselves, can they be expected to function as agents of change?

The times call for the adult educator to have a unique combination of personal and professional characteristics and orientations if he is to effect the changes that are required by the exigencies of the time. If the professional adult educator is bound up in tradition and organization, can he be expected to function as an agent of change?

Permanent systems, bound by tradition, whether persons, groups, or organizations, find it difficult to change.

Because a change agent's position is located midway between the bureaucracy to which he is responsible and the client system in which he works, he is necessarily subject to role conflicts. For this reason, his ability to tolerate ambiguity is an important factor in determining his success. The change agent is often expected to engage in certain behaviors by the change system, and at the same time he is expected by his client system to carry on quite different actions. (Rogers, Communication of Innovations, page 102)

CE 011 105

Malcolm Knowles claims that the people who are attracted to the graduate programs in adult education tend to be different from those attracted to other areas of education in that they are less comformist, less inhibited, more adventuresome, more sensitive, tend to be impatient with the rituals and constraints of bureaucracy, and have a high tolerance of ambiguity (Knowles, The Modern Practice of Adult Education, page 72)

Adult education, so long on the margin of the education field, is now an integral part of life in the United States because the social-technical climate demands continued learning by adults. Fully developed curriculums in more than 20 universities in the U.S. and Canada lead to Ph.D. and Ed.D. degrees with a major in adult education. (Kreitlow, pp. 116, 138, and 143) To date over 1500 persons hold doctoral degrees from these institutions of higher education that conduct programs to prepare scholars and practitioners in adult education.

The degree-granting institution can be expected to have a considerable influence on the professional adult educator not only because it provides the technical competence exercised by professional adult educators in the various institutions and organizations in society, but also because the particular philosophy and attitude it inculcates would affect the professional adult educator's orientations. Can these institutions orient professional adult educators toward change or non-change?

If one assumes that the professional adult educator's combination of personal and professional characteristics and orientation are important in the change process, there is need to investigate these characteristics and orientations and seek to determine the relationship that may exist among them.

A dichotomous model made up of two classes of men--the change oriented and the non-change oriented, however, would be for too simple to explain how change occurs. It would leave out the main variable found in theories of social change, the value-interest dimension. A more complete model suggested by Neal (Values and Interests in Social Change) introduces a second division cross-cutting the change and non-change categories, characterizing orientation to choice. This can be called the value-interest dimension. One possible explanation of the function of value and interest in the process of social change assumes that decision makers tend to make choices either in value or interest terms. This explanation is based on the assumption of the existence of relatively stable personality characteristics. It is expected that consistent types of resistance to and acceptance of change characterize views of the world. Ideas concerning conflict of interest groups and value orientations of social groups play a part in theories of social change.

Values refer to widely shared conceptions of the good; societal values refer

to conceptions of the good society. Interests refer to desires for special advantages for the self or for groups with which one is identified. In Neil Smelser's terms, "Interests refer to short-term desires to protect or to maximize institutionalized positions of the individual or the group." Smelser perceives a critical difference between values and interests. He maintains that "whereas we are prepared to bargain with our interests, we will not enter into practical compromise with our values." (Smelser, unpublished "Memorandum to Stouffer" circulated in Social Relations 272, a seminar on the Analysis of Social Data given in the Social Relations Department at Harvard in the spring of 1960) Presumably no one acts for or against change unless he is interested. This is not the problem. The concern here is whether interests constitute for the actor the more dynamic criterion for choice. Is his main intention to realize an ideal or to service a group? The intention of the value-oriented actor is more to bring about in time those programs, behaviors and artifacts he believes reflect the values to which he is committed. The interest-oriented actor's primary intention is to gain approval from certain people he loves, fears, respects. This primacy of one commitment over the other characterize people in roles in many different groups irrespective of the primary functions of the group. The goals of the group do not determine the orientations of the actors, but different orientation among the actors develop the characteristic style of the group at a certain time in some complex relation to its intended goal.

The value-oriented person is concerned with the achieving of a goal which is in conformity with a standard of excellence. Realization of values is his primary concern. The interest-oriented person is primarily concerned that the process of goal attainment afford advantage to certain people--to the exclusion, if necessary, of others. The value-oriented individual moves from group to group ever seeking to realize the same values; the interest-oriented person moves from value to value ever seeking them from the same group.

It has been proposed by Neal (Values and Interests in Social Change, pp. 17-18) that social change will be better understood as a social process when we know more about the ways values and interests are used as choice determinants by those in social situations in which they play significant parts. Her central hypothesis proposes that the way role incumbents respond toward changing that which is currently institutionalized is characterized by an orientation to change, non-change, and to values and interests as determinants of choices in their social system. She further hypothesized that these orientations to change, non-change, and value-interest, reflected in liberal or conservative attitudes and in universalistic and particularistic orientations to action, derive from, or at least are significantly related to, primacy of concern for one or another of four system problems: adaptation, goal

attainment, integration, and pattern maintenance.

Neal proposes that preoccupation with some of the functional problems facing social systems may explain why people in roles tend to view the world in certain characteristic ways. An emphasis on one of these four functional problems may be related to resistance to or acceptance of change and the tendency to make choices in value or interest terms. Careful observation of decision-making situations reveals that the same situation receives quite different definitions from actors oriented to change than from actors oriented to resist change. Further observations reveal another breakdown within the change and non-change groups: decisions in terms of values or in terms of interest. Thus, in any given situation, four types of responses can be distinguished among the actors, depending on their definitions of the situation: a value-change orientation, an interest-change orientation, a value-non-change orientation, and an interest non-change orientation which can be expected to be present as relatively enduring characteristics in any choice-making situation.

Orientations to the world include a broad range of topics, too board for any one study. The selection of categories is limited by the assumption that the definition of the situation is a fundamental determinant of human action and that the personal and professional characteristics of professional adult educators are selective factors in defining the situation. How professional adult educators perceive the world limited the selection of categories to change, non-change, and value-interest orientations.

It is important for the understanding of the broader social-psychological issues on which this study is based to recognize that this is a study of perception and more particularly, of the sociology of knowledge. A person can respond to a situation only as he perceives it, and this perception is limited by the knowledge available to him concerning it (see Gordon Allport, The Nature of Prejudice, abridged, Chapter 10, "The Cognitive Process," pp. 165-177).

Rogers says that one of the more useful ways of viewing social change is to focus on the source of change. (Communication of Innovation, page 30) Change occurs at the social system level and on the individual level, and these two levels are, of course, closely interrelated. Focusing on the individual level, Harp feels that the inclusion of personality variables will contribute little, however, in analyzing change. He states that if other sociological variables are included, the effect of "....personality may disappear." (Harp, "A Note on Personality Variables in Diffusion Research," Rural Sociology, 25:346-347, 1960)

The primary assumptions of this study were that there are essential differences among people in adult education in the way they define social factors relating

to change; that these orientations (change, non-change, value-interest) are grounded in different personal and professional characteristics. These differences would be a combination of personal and professional characteristics, and value-interest orientations as they relate to the change process.

The questions that the investigator sought to answer were: What are the personal and professional characteristics, the change, non-change, and value-interest orientations of professional adult educators? What are the relationships among these characteristics and orientations? Are adult educators more oriented to change than non-change? Are adult educators more value than interest oriented? Is there a relationship between the type of institution in which the professional adult educator functions and his change, non-change and value-interest orientation? Does the type of professional role (teacher/trainer, administrator, researcher) held by professional adult educators affect change, non-change, value-interest orientation? Are sex and age related to his change, non-change, value-interest orientations? Is the institution from which he secured his doctorate associated with his change, non-change, value-interest orientations. Can his years of experience in adult education be related to his change, non-change, value-interest orientation?

A research study that attempts to answer the above question should ultimately provide data to support or to question the literature that refers to the professional adult educator as an "agent of change."

## Research Procedures and Methodology

To survey the entire population of persons in the U.S. who presently hold doctoral degrees with a major in adult education would have required surveying almost 1,500 professional adult educators. For reasons of practicality and economy, the population was limited to those professional adult educators who received degrees from 1960-1970 inclusive. Random sampling was the method chosen since the objective of sample design is to accomplish the maximum precision with the least possible cost (Kish, "The Design of Sample Surveys" in Research Design and Analysis, pp. 46, 47). Names of doctoral graduates from a total of 21 different universities were arranged alphabetically according to sex, university, and year of graduation. A stratified random sample of 25 per cent of the men and 25 per cent of the women graduates from each university was selected. In cases where more than one but less than four names remained, the last name on each list was included to make up a representative number. This procedure increased the sample to more than 30 per cent of the population. The population was separated by sex to insure that this variable would be represented in the same proportion as it is present in the population.

The randomness was necessary to assure that the result (a) would be reflective of the total population and (b) could be related by statistical measure to the orientation scores.

## Data Gathering

A questionnaire was mailed to the systematic stratified random sample of over 30 per cent (225) professional adult educators who received doctoral degrees from 1960 to 1970 inclusive. This was done to insure that returns would approximate 25 per cent. The total population from which the sample was drawn numbered about 730. A 25 per cent sample of the 730 population would be 183. A total of 164 questionnaires were returned, which represented a 73 per cent return of the total number mailed and 23 per cent of the total population. While this was not the intended 25 per cent, it was of sufficiently high percentage to justify continuing the study. The total number usable for the study was 155, or 21.2 per cent of the total population.

Questionnaires were distributed throughout 44 states. The decision to mail the questionnaire meant running the well-known risk of poor returns and incomplete responses. While this problem loomed large, the distinct advantages of this method appeared to outweigh other methods. A sample of the questionnaire coded for orientation purposes is included in the paper distributed.

The personal characteristics examined were: (1) age, and (2) sex. The professional characteristics explored were: (1) years of experience in adult education; (2) institution from which the doctorate was secured; (2) type of professional position held; and (4) institutional setting. In order to determine change, non-change and value-interest orientations, Neal's instrument was employed because no standard method exists for measuring orientations to value-interest, change, and non-change. Since the data are only as good as the instruments used and the sample selected, Neal's instrument was used because it had been tested in a previous study and met stringent standards. A detailed description is given with the copy of the questionnaire itself.

The theoretical base from which the instrument was developed consisted of two alternative hypotheses: (1) Are values regularly subjected to distortion, manipulation, and reinterpretation to fit more dynamic, unconscious, or conscious pressures for action such as needs, desires, or functional exigency? (2) Or are values relatively stable elements that function to set limits to the variations of choice permitted an individual as he functions in his social roles? Of all the possible aspects of the value-interest-change problem that could be explored, the

one that stimulated Neal's study was the examination of the relationship between these two questions on the one hand and the orientation to change on the other. The study assumed that both values and interests operate in every case but that individuals differ in the extent of their response in the guiding function of the one and the driving force of the other. The task, then, in devising a measuring instrument was to capture these orientations to value, interest, change, and non-change.

The instrument appeared to give striking evidence of measuring something that explains differences in styles of response to change and to be adequate for the sample population in my study.

## Data Analysis

The data collected by the aforementioned instruments were quantified, coded, and punched on IBM cards for computer analysis at the Indiana University Research Center at Bloomington, Indiana. The data was analyzed by a multiple regression statistical procedure designed to analyze and explain the variance in a dependent variable due to the effect of various independent variables. This analyses produced means and correlation coefficients and correlation coefficients for the dependent variables. The reason for selecting multiple regression was that it predicts a maximum of the variance in the dependent variables, which in the present study were change, non-change, and value-interest orientations. Analysis of variance which applied the F-test was used to analyze variation which might be attributable to the independent variables which were the personal and professional characteristics of age, sex, years of experience, university from which the degree was secured, institutional setting and professional position. These personal and professional characteristics were related to scores on the orientations to change, value and interest in order to determine which personal and professional characteristics related to orientation measures and which other, though plausibly relevant, were in fact unrelated.

One advantage of the multiple regression approach in this study was that it disclosed the degree to which each independent variable was related to the dependent variables. This indicated the novel contribution of each independent variable in explaining change, non-change, and value-interest orientations. Multiple regression methods help to untangle the complex webs of interrelationship among the independent variables as they relate to the dependent variables. (Rogers, Communication of Innovations, page 192)

Both linear and curvilinear regressions were run to investigate which of these would give the closest approximation of experimental results. The results of the curvilinear regression analysis rather than the linear appeared to be a

closer fit for the data. Any higher degree equation, i.e., teritary, quartic, etc., was considered inappropriate due to the nature of the data. Multiple linear regression determines a linear equation which describes the relationship between the dependent variable and several relevant independent variables. This serves to determine the relative importance of each independent variable. Finally, a multiple linear regression was run to determine the variable that could explain changes in the dependent variable. Multiple linear regression also includes the other two types of regression.

In order to ascertain the degree of variation in the four orientations (change, non-change, and value-interest) between and within the personal and professional characteristics, two types of analysis of variance were used. The first was a one-way classification using the equation ($\Sigma x, \Sigma x^2, \Sigma(x)^2$). The male and female scores were generated separately and then combined for the purpose of analyzing the data to ascertain any sex difference. This was done for every personal and professional characteristic to determine if a male-female sex difference occurred. This was deemed necessary in order to prove conclusively that, in fact, a sex difference did exist.

The male and female scores were then combined to facilitate a two-way analysis of variance across personal and professional characteristics. This combination was carried out in order to make the two-way analysis more precise in that some variance which might have shown up between age groups in the one-way analysis might have been due to the separation of the sex groups. The two-way analysis strictly compares between and within groups by utilization of the aforementioned equation ($\Sigma x, \Sigma x^2, \Sigma(x)^2$) so that all variation may be accounted for by inter-, or intra-group score differences. This test allows the positive determination of where the variance lies.

For age groups, years of experience and time percentage of different professional roles, institutional settings and orientations, correlation coefficients, a mean score, and the F score were computed. These statistical procedures permitted an examination and analysis of degree of relationships among and within the personal and professional characteristics, change, non-change, and value-interest orientations and the testing of the hypotheses as stated.

Prior to analyzing the date, the 21 institutions granting the doctorate to the sample respondents were coded by number according to the following categories: members of the Big Ten, the state of California, Private universities, Southern State universities, Small Western universities and Eastern universities. The categories were chosen since they represented not only geographic division and types of schools, but also differentiated between state-supported public univer-

sities and private universities.

The questionnaires from the sample respondents from the Big Ten schools numbered 59; the number representing Private universities was 39; the total for the Southern States was 39; and the respondents from Small Western universities totaled 14. The three questionnaires returned from the state of California and the two from the Eastern states proved insufficient in number for analysis. These last two categories were, therefore, omitted in the statistical analysis because no meaningful results could be drawn from the small sample.

The largest number of respondents, 59, were from the Big Ten and the smallest number, 14, were from Small Western universities. Small Western universities, however, had the largest percentage, 28.5, of female respondents. The total percentages indicate that women made up about one-fifth of the entire sample, and men represented four-fifths. Over half of the respondents were in the age group 40-49, and the smallest representation was in the 25-29 age group. There were no representatives in the 25-29 age group from the Big Ten or Private universities, indicating that the younger, professional adult educators tend to come from Southern States and Small Western universities. Private universities had an equal distribution between the 40-49 and 50-59 age groups and also had the highest percentage in the 60+ age group.

The highest percentages in years of experience for both Big Ten and Private universities were in the 20-24 year grouping, while the lowest percentage for each was in the 35+ year grouping, which was not represented for the Southern States or Small Western universities. The highest percentage in the sample was from Small Western universities for those with 0-4 and 15-19 years of experience. The composite percentages indicated that the largest number of professional adult educators from all the universities have a 20-24 years of experience in adult education; the next highest percentage was for the 10-14 years of experience.

Among all the respondents, over 50 per cent function in administration. The highest percentage, 60.5 from Southern State universities, were administrators. Only for Private university graduates did the percentage in the category "Other" roles exceed the percentage for those in the Teaching/Training role. Small Western universities had the highest percentage in the Teaching/Training role. The smallest percentages appeared for the Research role.

More than 70 per cent of the sample were in College/University settings. The Southern States and Small Western universities each had over 78 per cent of their graduates in College/University settings. The Big Ten and Private universities were the only ones with representation in all institutional settings. The Big Ten had the highest percentage serving in Health Care and Business and Industry settings. Private university graduates had the highest percentage serving in a Religious and

"Other" institutional settings.

Examination of the orientation scores after they were computed for the entire sample, shows that 116, or 74.8 per cent, were value-change oriented; 28, or 18.1 per cent, interest-change; eight, or 5.2 per cent, interest non-change; and only one, or .7 per cent in the entire sample, had a value non-change orientation. Two, or 1.3 per cent, had zero scores and, nence, were not classifiable. More than 90 per cent of the entire sample had a change either value or interest orientation.

The highest percentage in the value-change orientation was for Private universities with a percentage of 89.7 per cent. The lowest value-change percentage, 42.9 per cent, was for Small Western universities. The Private universities also had the lowest interest-change orientation percentage of 2.6 per cent. The highest percentage in the interest-change orientations was for Small Western universities, where there was equal distribution in value-change and interest-change orientation with percentages of 42.9 in each. The Small Western universities also had equal percentages and the highest percentages (7.14) for value non-change and interest non-change orientation. Big Ten universities had the second highest percentage (6.8) in the interest non-change orientation.

The highest percentage, 89.7, in the value orientation was for Private universities. Small Western universities had the lowest percentage (50.0) for the value orientation. While all the interest orientation percentages were considerably lower than for the value orientation, the highest percentage (50.0) was for Small Western universities, which was almost double the highest percentages for all other degree-granting institutions. Private universities had the lowest percentage (10.3) in the interest orientation. For both the value and interest orientation, Big Ten universities and Southern States universities had comparable percentages in the middle range.

Although all of the change orientation percentages were high, the highest percentage for change orientation was for Southern State universities with 97.4. The lowest percentage, 85.7, was for Small Western universities which predictably had the highest percentage, 14.3, for the non-change orientation. The next highest percentage for non-change, 10.1, was for Big Ten universities. The lowest percentage, 2.6 for non-change, was for Southern States universities. Overall percentages were highest for the change and value orientations.

## Statement of the Problem

Since the problem of this study was to determine the relationship of selected personal and professional characteristic to orientations of change, non-change, and

value-interest among professional adult educators, the hypothesized statements will now be treated with the findings. For purposes of brevity, I am combining related hypotheses.

Hypothesis 1. The orientations toward change and non-change are associated with value-interest orientations.

The relationship among change, non-change, value and interest orientations was evident. It can be noted that those who scored highest on change had the highest value scores and vice versa. Those in the sample with the highest interest orientation scores had non-change scores. Only one value non-change person appeared in the entire sample. Those with an interest orientation had lower change scores than the value-oriented person. The coefficient of correlation between change and non-change was .67, significant to .01 level of significance. The coefficient between change and interest was a -.23, a negative correlation significant at .02 level.

Hypotheses 2 and 3. Professional adult educators are change-oriented and value oriented. Table 3 shows that out of 155 total respondents, 144 had a change orientatation (VC and IC). The number with a non-change orientation (VNC and INC) was nine. This means that 92.9 per cent of the respondents were change oriented as compared with 5.8 per cent with a non-change orientation. This finding strongly supports the hypothesis that professional adult educators are change oriented.

Examination of the scores in Table 3 shows that 117 out of the 155 total of respondents, or 75.5 per cent, had a value orientation. The number of interest-oriented respondents was 36, or 22.2 per cent of the total number of respondents. The next significant coefficient of correlation was .65 (level .01) between value and change whereas there was no significant relation between interest-change or non-change orientations. These findings strongly support the hypotheses that professional adult educators are value oriented since more than three-fourths of the respondents were value oriented while fewer than one-fourth were interest-oriented and the value-change coefficient was indicative of a high degree of relationship. Non-change coefficients were not significant for any orientation.

Hypotheses 4 and 5. An orientation toward non-change and interest is positively related to age.

The percentage of those over the age of 40 with a non-change orientation exceeded the number and percentage of those under 40 with a non-change orientation. Since the older age groups also represented some of the highest change scores, this finding may be somewhat misleading.

The change orientation according to age and sex indicated that the highest change scorers were among age groups from 40 to 60+. Figure 4 shows the means for non-change orientations were highest among the 40-49 group only. The analysis of variance seemed to indicate that age has a significant effect on the non-change orientation. Analysis of within age groups resulted in a non-significant effect verifying the significance of the effect between age groups. The coefficient of correlation between age and non-change was -.06 and .12 between age and change which were not significant.

The analysis of variance appeared to indicate a relationship, but this was not supported by the other findings. None of the coefficients were significant; therefore, the hypothesis that orientation toward non-change is positively related to age was not supported by the data.

The mean interest scorers of those in age groups from 40 to 60+ exceeded those in the age groups of 25-39; however, the coefficient of correlation between interest and age was .08, which was not significant. These findings do not support the hypothesis that orientation toward interest are positively related to age although the higher scores were among the higher age group, but the coefficient of correlation was not significant.

Hypothesis 6. An orientation toward value is inversely related to age.

The highest value scores appeared in the 40-49 age group followed by the 50-59 age group. The coefficient of correlation between value and age was .06, which was not significant; therefore, the findings do not support the hypothesis that orientation toward value are inversely related to age.

Hypothesis 7. Women professional adult educators are less change oriented than men professional educators.

The difference between the mean change score for men and the mean change score for women was slight. However, women scored a mean of 24.0 for non-change, while the mean non-change score for men was only 8.3.

The coefficient of correlation of value oriented persons between sexes and non-change was .18 (significant at -.10). The correlation between sex and change was -.06, which was not significant.

This finding supports the hypothesis that women professional adult educators are less change oriented than men professional adult educators both because the mean change score for women is somewhat lower than that for men and because the non-change score for women was considerably higher than the mean non-change score for men. Additional support was provided by the correlation coefficient between sex and non-change which was .18, significant at .10 level.

Hypothesis 8. Women professional adult educators are more value oriented

than men professional adult educators.

Although the value mean score for women exceeded that of the value mean score for men, the finding that the mean interest score for women was also higher than the mean interest score for men does not support the hypothesis that women professional adult educators are more value-oriented than men professional educators. The coefficient of correlation between value and sex was .04, while the coefficient of correlation between interest and sex was .23, significant at the .02 level.

Hypothesis 9. Orientations toward change and non-change are associated with the institution from which the doctorate was secured (degree granting institution).

The highest mean change score of 31.8 appeared for Private university graduates. Big Ten university graduates had the lowest mean change score of 17.0.

The non-change mean score of 22.0 for Small Western university graduates was the highest; Private university graduates ranked lowest with a non-change mean score of 5.0.

The data tend to support the hypothesis that change and non-change orientation are associated with the degree-granting institution.

Hypothesis 10. Orientation toward value or interest is associated with the institution from which the doctorate was secured.

Small Western university graduates had the highest mean value score of 23.5. Big Ten university graduates had the lowest mean for value orientation (14.9). Private universities had the highest mean (9.3 points above the next highest) for interest orientation with 17.7. Southern States university graduates had the lowest mean score for the interest orientation.

The coefficients of correlation between value and change among all the degree-granting institutions was significant at .01. The highest coefficient, .93, between value and change was for graduates of Small Western universities. Big Ten university graduates had the lowest, .57, significant at .01 level. Private and Southern States university graduates had value-change coefficients of .76 and .65 respectively--both significant at .01 level.. All correlation coefficients between interest and change among the categories of degree-granting institutions were negative with Private university graduates having -.70 (significant at .01) and the Big Ten graduates had the lowest negative correlation of -.14 between interest and change which approached significance.

The highest coefficient of correlation for interest, non-change scores was for Private university graduates with .97, followed by a coefficient of .35 for Big Ten university graduates. Both coefficients of correlation were significant

at .01 level. The non-change coefficient of correlation for Southern States university graduates was .17, significant at .10 level. Graduates from Small Western universities had a coefficient of correlation of .05, which was not significant.

The data support the hypothesis that orientation toward value and interest are associated with the institution from which the doctorate was secured since the variation in both value and interest orientations show a divergence in mean value and mean interest scores and the coefficients of correlation show a relationship to the degree-granting institutions.

The hypothesis dealing with change, non-change, value-interest orientations and professional characteristics of role and institutional setting will be treated together in the interests of saving time.

Those serving in Administration had the highest change mean (32.1). Those functioning in "Other" professional roles had a change mean of 29.7. Professionals serving in Research were limited to men who had the lowest change mean (25.9) followed closely by those in Teaching/Training with a change mean of 26.1.

No non-change scores appeared for those serving in a Research role, and there was little difference among the mean non-change scores for the other three roles.

The correlation coefficients between orientations and professional roles were not significant, however.

Only men were represented in the Research role and had the highest value mean of 25.2. There was little difference in the value means of those in Administration and the Teaching/Training role.

The interest mean scores were fairly equal among professional roles except for those serving in Teaching/Training who had the lowest interest mean of 9.3. The only coefficient that was significant was for interest with "Other" roles which was .31 significant at .01 level.

According to institutional settings, professionals in Business and Industry represented only by men, had the highest change mean of 30.9, followed closely by those in "Other" institutional settings who had a change mean of 29.4. The lowest change mean appeared in the Health Care setting, where the change mean was 20.2.

The non-change mean scores were considerably lower than change mean score for all institutional settings. Those in College/University settings had the highest non-change mean of 9.7. No non-change orientation scores appeared for Business and Industry or Health Care settings.

The highest correlation of value-change and institutional settings was for those in "Other" institutional settings with .25, significant at .02 level. Although the change orientation coefficients all exceeded the non-change coefficients, no others were significant.

Those in "Other" institutional settings had the highest value mean of 24.7, which exceeds the value means for all the other institutional settings. The value mean for the Religious setting was the lowest (11.0).

The highest mean for interest was for College/University setting with 12.4. No interest scores appeared for Business and Industry. The interest mean was only 1.0 for those functioning in a Religious setting.

The only correlation coefficient that was significant appeared for "Other" institutional settings.

## Analysis of Data Unrelated to Hypotheses

A very interesting finding was that orientations were strongly related to sex. A one-way analysis of variance was done where male and female scores were generated separately and then combined for the purpose of analyzing the data to determine if, indeed, the difference was in sex. This was done by orientation across every personal and professional characteristic to determine if a male/female sex difference occurred. The purpose of this analysis was to attempt to determine whether, in fact, a sex difference did exist.

The male and female scores were then combined to facilitate a two-way analysis of variance across personal and professional characteristic by orientation. This combination was carried out in order to make the two-way analysis more precise because some variance which might have occurred between some personal or professional characteristic in the analysis might have been due to the separation of the sex group. The two-way analysis compared between and within groups so that all variation could be accounted for. This test allowed the positive determination of where the variance lay.

The dichotomy between men and women occurred again because the role and setting appeared to have less effect than the sex variable. The F-tests of 47.9 and 63.6 for role and setting respectively between men and women indicated again a high level of significance.

There was significant variation between role and setting. A pooling of the role characteristic resulted in an F-test of 33.4, which was higher between role than the unpooled F-test scores of 28.0 between roles. For the between settings, the F-test was 43.5; but when the sexes were pooled for settings, the F-test again dropped to 13.1 although both were significant at the .001 level.

While the variation between men and women for all personal and professional characteristics was present, the most significant variation between the sexes was in the value-change orientation in relation to years of experience (F-test 254.3) and in the change orientation by age. The F-test for the latter was 117, which, needless to say, was very significant.

## Summary and Conclusions

The value versus interest orientation was probably the key one throughout the study. The interest orientation, whether the persons were change or non-change oriented, did not prove significant since the change versus non-change oriented did not show a significant differential in their interest scores. This finding appeared to indicate that interest-oriented persons were not affected in the degree of their interest orientation whether they were change or non-change oriented. Change persons, however, appeared to be affected whether they were value or interest oriented because the results were significant at a high level of confidence. This finding indicated that value is a prime orientation because a value orientation of any given group had a significant effect on the mean changeability, but the interest orientation did not significantly affect change or non-change.

Sex, however, was the single most significant characteristic related to change in relation to every personal and professional characteristic.

The number of women professional educators serving in Administration was not proportionate to the number of men professional adult educators serving in Administration.

No women below 40-49 years of age appeared in the sample. Women either enter the field of adult education when they are older or younger women are not entering the professional field of adult education. Steps should be taken to encourage younger women to enter the professional field of adult education.

## Recommendations

On the basis of the findings of this study, the following recommendations are presented:

The findings indicate that professional adult educators have a change orientation. If this is accepted as important to adult education, job descriptions and settings should encourage and support the expectation that professional adult educators will serve as "agents of change."

If it is desirable to have younger women as professional adult educators, attention needs to be given to recruiting women in lower age groups since none appeared in the sample under 40 years of age.

If it is desirable to have the number of women professional adult educators serving in Administration be proportionate to the number of men, more women should be appointed to administrative leadership positions.

If the change, non-change criteria are accepted and if a change orientation does indicate change proneness in the recruiting process, consideration should be given to the fact that women in the sample are not as change oriented as the men.

An investigation should be made to determine if the change orientation indicated by the test corresponds to the role actually fulfilled by the person.

If persons having a change orientation actually function as "agents of change," then a screening instrument could be developed based upon the instrument used in this study.

If the criteria are accepted that there is an extremely significant difference in the male versus female orientations in almost every case and consistency can be expected within a given type of group, further study is needed to determine if this sex variation occurs across personal and professional characteristics.

Further study is needed to differentiate among land grant college/universities, state universities and private universities to determine if orientations to change, non-change, and value-interest are associated with the type of degree-granting institution.

More studies are needed in the field of education in general and adult education in particular focusing on criteria for selection of persons for positions.

BIBLIOGRAPHY


Adorno, et al, The Authoritarian Personality, Harper & Row Publishers, New York, 1950.

Allport, Gordon W., The Nature of Prejudice, Doubleday & Company, Inc. 1958.

Bauer, Raymond, Inkeles, Alex, and Kluckhohn, Clyde, How the Soviet System Works, Harvard University Press, Cambridge, Mass., 1959.

Bennis, Warren G., Benne, Kenneth D., and Chin, Robert, The Planning of Change, 2nd edition, Holt, Rinehart and Winston, Inc., New York, 1969.

Coser, Lewis A., and Rosenberg, Bernard, Sociological Theory, The Macmillan Co., New York, 1957.

Green, Burt, "Attitude Measurement," in the Handbook of Social Psychology, edited by Gardiner Linzey, Addison-Wesley Publishing Co., Inc., 1954, I, pp. 335-369.

Harp, John, "A Note on Personality Variables in Diffusion Research," Rural Sociology, 25:346-347, 1960.

Kish, Leslie, "The Design of Sample Surveys," in Research Design and Analysis, Phi Delta Kappa, Bloomington, Indiana.

Knowles, Malcolm S., The Modern Practice of Adult Education, The Association Press, New York, 1970.

Kreitlow, Burton W., "Research and Theory," in the Handbook of Adult Education, edited by Robert M. Smith, George F. Aker, and J. R. Kidd, The Macmillan Company, New York, 1970.

Levine, Sol, and Gordon, Gerard, "Maximizing Returns on Mail Questionnaires," Public Opinion Quarterly, XXII, No. 4, 1958, pp. 569-575.

Lippitt, et al, The Dynamics of Planned Change, Harcourt, Brace & World, New York, 1958.

Neal, S. Marie Augusta, Values and Interests in Social Change, Prentice-Hall, Englewood Cliffs, New Jersey, 1965.

Rogers, Everett, Communication of Innovations, The Free Press of Glencoe, New York, 1971.

Smelser, Neil, "Memorandum to Stouffer," unpublished article circulated in Social Relations 272, a seminar on the Analysis of Social Data given in the Social Relations Department at Harvard in the spring of 1960.

Wallace, David, "A Case for and Against Mailed Questionnaires," Public Opinion Quarterly, XVIII, No. 1, 1954, pp. 40-52.

## DESCRIPTION OF INSTRUMENT

Neal selected 120 cliche-like statements expressing attitudes toward change, value, and interest, which were formulated from suggestions culled from spontaneous remarks, current periodicals, other attitude scales, and more formal literary sources. After pre-testing subjects known for their conservative or liberal orientation (as judged by their peers), sixty items were selected, fifteen for each of the four orientations--change, non-change, value and interest. The selection was made in favor of those items that best discriminated between known conservative and liberal subjects. The final form of the questionnaire was then administered to a random sample of 259 or 70 per cent of the number sampled who returned the questionnaire. These completed forms were used to determine the discretionary power of the items. According to Adorno (The Authoritarian Personality, pp. 80-83), a discretionary power of approximately two indicates that the item was chosen by high scores than by low scores in the general area being measured. All of the items chosen had a score higher than two for the discretionary power.

The items in the instrument were deliberately designed to avoid specificity with reference to particularly valued area. Justice and freedom are the only values specifically mentioned in the orientation instrument.

The use of stimuli cliche statements actually selected from familiar, everyday expressions and thus more realistically grounded was intended to avoid the impersonalness of general surveys. If the findings of this study can be shown to have relevance in the study of professional adult educators, then this study can easily be replicated in other areas with parallel research instruments.

Neal's choice of cliche-type statements has strong support in a statement by Kluckhohn, Inkeles, and Bauer in their study of the Soviet system:

> It is a commonplace of psychology that the outlook of any group upon the world and experience is determined and reflected to an important extent by the cliches they continually use, by the habitual premises which they accept.
>
> (Bauer, Inkeles and Kluckhohn, How the Soviet System Works, p. 166)

This constitutes an enriched form of Thomas' definition of the situation statement that, "if men define a situation as real, it is real in its consequences," and gives clear suggestion of the kind of item one might develop for measuring different orientations to change, values, and interest--the cliches. Cliches are frequently heard and can easily be collected. By writing cliche-type items and asking subjects if they accept or reject them, one can get measures of orientation to content.

## SCORING OF INSTRUMENT

Scores were determined by coding each response according to whether the subject strongly disagreed, (-3), disagreed, (-2), disagreed slightly, (-1), did not answer (zero score), agreed slightly, (+1), agreed, (+2), or agreed strongly, (+3). In order to simplify the method of tabulation used by Neal, the investigator converted the ratings of +3 to -3 to a Likert scale of 6 to 1 assigning "6" to a +3 response; "5" to a +2 response; "4" to a +1 response; "3" to a -1 response; "2" to a -2 response; and "1" to a -3 response. The scores were then summed for each of the four variables: values, interest, change, and non-change. The absolute distance between the change and non-change scores and the value and interest scores was then determined. These two numbers became the subject's final score, each marked according to which the two variables was more positive. Since there were 15 value items, the highest score possible on value was 6 times 15. A perfect and consistent score would have been 90 on value and a 15 on interest; the score assigned would be 75 because the distance (or difference) between 90 and 15 is 75. If a subject had a 50 for value and a 60 for interest, the score was assigned as 10 for interest with the interest being the more positive score. So also, if a subject had a 32 for change and a 30 for non-change, the score total was 2 for change, since this was the more positive score.[1] Personal and professional characteristics were related to scores on the orientations to change, values, and interests in order to determine which personal and professional characteristics related to orientation measures and which others, though plausibly relevant, were in fact unrelated.

Prior to analyzing the data, the 21 institutions granting the doctorate to the sample respondents were coded by number according to the following categories: members of the Big Ten, the state of California, Private universities, Southern State universities, Small Western universities and Eastern universities.

[1]The effort to measure attitude and to consider the meaning of intervals between responses has a long history. The most complete analysis of all aspects of this issue can still be found in Burt Green's "Attitude Measurement," Handbook of Social Psychology, pp. 335-369.

A STUDY OF PROFESSIONAL ADULT EDUCATORS

Subject number _____

## A. Personal and Professional Characteristics

Directions: For the following questions please fill in the blanks and check the appropriate categories.

1. Your age in years: _____25-29 _____30-39 _____40-49 _____50-59 _____60+
2. Sex: _____Male _____Female
3. Years of experience in the field of adult education: _____
4. Institution from which you earned your doctorate: _____
5. Type of professional position you hold. If your duties embrace more than one category please indicate by percentages the portion of your time that is devoted to each.

   _____% administration

   _____% teaching/training

   _____% research

   _____% other (please indicate) _____

6. Professional setting in which you perform most of your duties:

   _____college/university/seminary

   _____health care institution (acute and mental hospital, etc.)

   _____business and industry

   _____church related institution (exclusive of college, university, or seminary)

   _____other (please specify)_____

## B. Change, Non-Change, and Value-Interest Orientations

Directions: In the following questions you will find a series of statements expressing opinions of the kind you might hear from persons around you. For each statement there are a set of six possible answers.

| | |
|---|---|
| +1 Agree slightly | -1 Disagree slightly |
| +2 Agree | -2 Disagree |
| +3 Agree strongly | -3 Disagree strongly |

You are asked to read each statement and then write a plus 1 (+1) if you agree slightly; plus 2 (+2) if you just agree; or a plus three (+3) if you agree strongly; a minus one (-1) if you disagree slightly; a minus two (-2) if you disagree; or a minus three (-3) if you disagree strongly.

Each statement stresses an emphasis, not an absolute. You are simply asked to state the direction you would prefer that emphasis to take and the relative strength of your response. If you have some doubt or reservation about any of the items, the directions at the top of the next page suggest what you can do.

This is not a test of ability. There are no answers that will be scored right or wrong. Each person's opinion may differ from that of others in many respects. Just answer according to your preference.

Be sure to answer every question in some way. This questionnaire is for research purposes only. Your responses will be kept strictly confidential.

| | |
|---|---|
| Agree slightly +1 | Disagree slightly -1 |
| Agree +2 | Disagree -2 |
| Agree strongly +3 | Disagree strongly -3 |

Kindly place the numbers with the plus or minus sign in the columns to the right of each item. Where you are hesitant or uncertain, place a line (like a minus sign) to the far left of the page beside the item (see example below) and still take the choice that comes nearest to your opinion. Any comments you wish to make on the opposite page will be gratefully received. Please mark item numbers beside such comments.

**Sample item and sample responses:**

| | |
|---|---|
| The government does not really care what people like me think. | -2 |
| ___ I expect the world to be much better off ten years from now. | +3 |

**Start here:**

| | | | |
|---|---|---|---|
| 1. | The best way to improve world conditions is for each man to take care of his own corner of the vineyard. | 1 | I |
| 2. | If I were to follow my deep convictions, I would devote much time to reform movements. This seems to me to be a primary need today. | 2 | C |
| 3. | The society of tomorrow is already developing from the values believed in by people today. | 3 | V |
| 4. | Although change is necessary and can be a good thing, loyalty to the long tradition is the stable base on which we should place primary focus of social concern. | 4 | NC |
| 5. | When I am working at my own job, I get so absorbed in it that I tend to neglect what is going on in the rest of the world. | 5 | I |
| 6. | There is really something refreshing about enthusiasm for change. | 6 | C |
| 7. | Having ideals is a wonderful thing, but realistically speaking, in most of the really important decisions in life, personal or group interests, and not ideals, play the major decisive role. | 7 | V (Score in reverse) |
| 8. | Young people sometimes get rebellious ideas, but as they grow up they ought to get over them and settle down. | 8 | NC |
| 9. | In times of crisis, it is only natural for men to think of themselves first even though they may be ashamed of it afterwards. | 9 | I |
| 10. | Although society has progressed a long way, still it contains at present many social institutions which ought to be changed. | 10 | C |
| 11. | When I think of social reform, I think of things I believe in so deeply I could dedicate all my efforts to them. | 11 | V |
| 12. | By continuing their traditional approach in their teaching role, educational institutions will better accomplish their mission then by experimenting with new methods. | 12 | NC |
| 13. | Man is not an idealist by nature. It is hard for him not to be motivated primarily by self-interest. | 13 | I |
| 14. | Every great step forward in world history has been accomplished through the inspiration of reformers and creative men and women. | 14 | C |

| | | | |
|---|---|---|---|
| Agree slightly | +1 | Disagree slightly | -1 |
| Agree | +2 | Disagree | -2 |
| Agree strongly | +3 | Disagree strongly | -3 |

| | | | |
|---|---|---|---|
| 15. | I have a clear set of values that I hope some day to see implemented in my community. | 15 | V |
| 16. | If I were to follow my deepest concern, I would concentrate on trying to preserve the very best of the long tradition. This seems to me to be a primary need today. | 16 | NC |
| 17. | The ideal of temporal peace inherent in the idea of the state is never strong enough to overcome the dynamic forces of human self-will. | 17 | I |
| 18. | Man should try to rectify in creation everything he can rectify. | 18 | C |
| 19. | Concerns about caution have little place when the issue is one of social injustice. | 19 | V |
| 20. | The future is out of our hands. I will await what happens and accept what comes. | 20 | NC |
| 21. | We have to exercise caution when we act in the local community because it is so easy for others to misinterpret what we are trying to do. | 21 | I |
| 22. | The main function of the intellectual is to meet the unknown and unstructured future creatively. | 22 | C |
| 23. | Because I have not given it a great deal of thought, I would find it quite difficult to say right now what I think ideally the world ought to be like. | 23 | V (Score in reverse) |
| 24. | In the final analysis the strongest basis for planning for the future is to trust to the experience of the past and base the decision-making on the facts, the historical facts. | 24 | NC |
| 25. | When people are better, the world will be better. Let each man then tend to his own reform. | 25 | I |
| 26. | The current situation in society calls for change. We must respond at once. | 26 | C |
| 27. | I am so deeply concerned about social injustice that I would rather join a community program that is endeavoring to eliminate it and take a chance that the program will be good than miss an opportunity to do something about it. | 27 | V |
| 28. | I like conservatism because it represents a stand to preserve our glorious heritage. | 28 | NC |
| 29. | If you dedicated yourself to the work of some group or organization, it is only right that you should put the interests of that group before those of all other groups. | 29 | I |
| 30. | If you want to get anywhere, it is the policy of the system as a whole that needs to be changed, not just the behavior of isolated individuals. | 30 | C |
| 31. | When I hear of people who are deprived of freedom and of just treatment I really get involved; I find myself planning how I can help them. | 31 | V |

| | | | |
|---|---|---|---|
| Agree slightly | +1 | Disagree slightly | -1 |
| Agree | +2 | Disagree | -2 |
| Agree strongly | +3 | Disagree strongly | -3 |

| | | | |
|---|---|---|---|
| 32. | From my experience, I have learned to believe that there is nothing new under the sun. | 32 | NC |
| 33. | When you come right down to it, it is human nature never to do anything without an eye to one's own profit. | 33 | I |
| 34. | Any organizational structure becomes a deadening weight in time and needs to be revitalized. | 34 | C |
| 35. | The most important issues in the world today are issues of social justice. | 35 | V |
| 36. | In general, it seems to me that though reformers come and go, still the world goes on in the same pattern of ups and downs. | 36 | NC |
| 37. | When you are young you can afford to be an enthusiast for reform, but as you grow older you learn that it is the better part of wisdom to confine your efforts within your own field. | 37 | I |
| 38. | Liberalism is a good thing because it represents a spirt of reform. It is an optimistic outlook expecting meaningful advance. It may not always represent justice, light, and wisdom, but it always tries to. | 38 | C |
| 39. | Man is neither egoistic nor altruistic by nature, but he has a tremendous responsibility to become the latter. | 39 | V |
| 40. | An organizational structure that has stood the test of time is a far better instrument for carrying out programs today than one that is just emerging from the experimental laboratory. | 40 | NC |
| 41. | In the last analysis, it is having the power that makes the difference. | 41 | I |
| 42. | All organizations must adapt to the findings of science and modern exigencies. | 42 | C |
| 43. | The things I think are important and valuable for the good life are so clear to me that I could list them right now with little difficulty. | 43 | V |
| 44. | The main function of the intellectual is to evaluate critically all that is past. | 44 | NC |
| 45. | It is really concern for security, personal satisfaction, recognition, and affection which motivate most men and women in their daily behavior. Ideas about justice and freedom are quite remote. | 45 | I |
| 46. | Re-evaluation and reform are constantly necessary, and I am ever eager for each new effort to make a better world. | 46 | C |
| 47. | An injustice in the local community should never find social institutions silent witnesses. | 47 | V |
| 48. | Looking back over the long history of the United States, we have every reason to be proud of the contributions she has made in the societies where her influence has penetrated. | 48 | NC |
| 49. | No matter how wonderful the ideas you are trying to get across may be, you cannot do a thing unless you have the powers that be on your side. | 49 | I |

| | |
|---|---|
| Agree slightly +1 | Disagree slightly -1 |
| Agree +2 | Disagree -2 |
| Agree strongly +3 | Disagree strongly -3 |

| | | |
|---|---|---|
| 50. | The world as it is is a pretty good place. We really do not need all this concern about change. | 50 C (scored in reverse) |
| 51. | An educator can hardly call himself an influence for good if he is not deeply involved in the social welfare of people as he is in the subject matter he teaches. | 51 V |
| 52. | My first reaction when I think of the future is to be aware of its dangers. | 52 NC |
| 53. | Because it is often difficult to know what values are involved in social action programs, I prefer to wait to see which way things are going before joining them. | 53 I |
| 54. | I am not satisfied with the world as it is, and I spend now, and intend to spend, much more of my life trying to change it. | 54 C |
| 55. | I would prefer being called and idealist than a practical man. | 55 V |
| 56. | Rather than get upset about them, we have to learn to live with most of the conditions in the world as they are. | 56 NC |
| 57. | No matter how good a cause sounds, and no matter how moral the principle on which it is based, still an administrator should follow a wait-and-see policy so he will not get involved in any embarrassing situations from which he will have difficulty withdrawing afterward. | 57 I |
| 58. | Would that the middle-aged and elder citizen could retain that enthusiasm for initiating change that frequently characterizes the rebellious youth. | 58 C |
| 59. | When I am dealing with the problems of my own job, I find myself constantly trying to make decisions that will help solve the bigger issues of justice, etc., for all mankind. The world's problems are very much my problems. | 59 V |
| 60. | No change, but permanency and stability are what we are aiming for in the work that we do. | 60 NC |

*This is an exact copy of the instrument (adapted) used in the study; however, this copy has been coded to show how the answers were scored. The code appears in the answer boxes: I-Interest item, V-Value item; C-Change item; NC-Non-change item. The three items coded in reverse are indicated in the boxes.